



**Indoor Air Quality (IAQ) Report
Atchley Home Inspections LLC**

Date/Time:

Client Name:

Property Information:

Air Quality Measurements

Pollutants Tested	Measured Value	Pass or Fail
TVOC (Total Volatile Compounds):		
CO2 (Carbon Dioxide):		
PM 2.5:		
PM 10:		
HCHO (Formaldehyde):		

Humidity:		
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VOCs (Volatile Organic Compounds) Gases emitted from paints, cleaners, new furniture, and perfumes (e.g., benzene, ethanol).

<250 ppb or <0.3 mg/m³

CO2 (Carbon Dioxide) A gas we exhale; used primarily as a proxy to measure how well a room is ventilated.

400 – 800 ppm (Ideal) <1,000 ppm (Acceptable)

PM 2.5 (Fine Particles) Tiny particles (<2.5 microns) from cooking, smoke, or candles that can enter the bloodstream.

<5 µg/m³ (Annual avg)

PM 10 (Coarse Particles) Larger particles like dust, pollen, and mold spores that can irritate the eyes and throat.

<15 µg/m³ (Annual avg)

HCHO (Formaldehyde) A specific, pungent VOC found in pressed-wood products and glues.

<0.016 ppm (16 ppb) or <20 µg/m³

Humidity (Relative) The amount of moisture in the air. Affects mold growth and respiratory comfort.

30% – 50% (Ideal) 40% – 60% (Acceptable)

Observations/Recommendations

Inspector Signature:

Date/Time:

How to Improve Your Air Quality

- Reducing TVOCs (Total Volatile Organic Compounds)

Increase Ventilation: Open windows and doors to allow fresh air to circulate and dilute chemical gases.

Source Removal: Identify and remove the source of the smell, such as open paint cans, harsh cleaning chemicals, or scented air fresheners.

Air Purification: Use an air purifier with an **activated carbon filter**, which is specifically designed to trap gases and odors that standard filters miss.

- Lowering CO₂ (Carbon Dioxide) Levels

Improve Airflow: High CO₂ is often a sign of a "stuffy" room with poor ventilation. Open a window or use a window fan to bring in outdoor air.

Check HVAC Dampers: Ensure your HVAC system is pulling in enough fresh outdoor air and that your exhaust fans (kitchen and bathroom) are functioning correctly.

Add Indoor Plants: While they won't fix a major ventilation issue, plants can help naturally absorb small amounts of CO₂.

- Filtering Particulate Matter (PM 2.5 & PM 10)

Upgrade HVAC Filters: Use a high-efficiency filter (MERV 13 or higher) in your home's heating and cooling system to trap fine dust, pollen, and smoke particles.

Use HEPA Vacuums: Vacuum regularly with a HEPA-certified vacuum to prevent dust and allergens from being kicked back into the air.

Manage Cooking Smoke: Always use the range hood vent when cooking and avoid burning candles or incense, which are major sources of fine particles.

- Eliminating HCHO (Formaldehyde)

"Off-Gassing" New Items: If you buy new pressed-wood furniture or carpets, let them sit in a garage or well-ventilated area for a few days before bringing them inside.

Control Temperature: Formaldehyde is released faster in high heat and humidity. Keeping your home cool can slow down the "off-gassing" process.

Choose Low-VOC Products: When remodeling, look for products labeled "No Added Formaldehyde" (NAF) or "Ultra-Low Emitting Formaldehyde" (ULEF).

- Managing Relative Humidity

Dehumidify: If levels are above 60%, use a dehumidifier to prevent mold growth and dust mite activity.

Humidify: If levels are below 30% (common in TN winters), use a humidifier to prevent dry skin and respiratory irritation.

Fix Leaks: Ensure there are no plumbing leaks or moisture intrusion issues in the crawl space or attic that are driving up indoor humidity.



